From: Brown, Cheryl A. [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DD6F8A562924439AAF97CA98DDAF1E10-BROWN, CHERYL]

Sent: 12/15/2016 6:54:45 PM

To: Fullagar, Jill [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=7ba061353c314b40a14a8be1ee382ae3-Gable, Jill]

Subject: FW: briefing doc

Attachments: HQ Briefing Oregon Marine Water Listing 111016 (002) LC&CAB.docx

All of these data are publically available.

From: Brown, Cheryl A.

Sent: Monday, November 14, 2016 4:35 PM

To: Fullagar, Jill <Fullagar.Jill@epa.gov>; Cox, Michael <Cox.Michael@epa.gov>; Labiosa, Rochelle <labiosa.rochelle@epa.gov>; Cope, Ben <Cope.Ben@epa.gov>; Cora, Lori <Cora.Lori@epa.gov>

Subject: RE: briefing doc

Here are my comments which I incorporated into the version that Lori Cora sent.

In addition, I went through the WQ dataset and pulled those sites that are within OR State waters. These are the additional carbonate chemistry data that were provided by NOAA/UW, which didn't have pteropod data but were within state waters.

In 2011: There were 3 stations within OR state waters with carbonate chemistry. One station (40) 100% of the water column was undersaturated and two stations (26 & 27) only had small percentage of water column undersaturated (27 & 42%, respectively).

In 2013: There were six stations within OR state waters with carbonate chemistry. All of these stations had high amounts of undersaturated water.

Station	Percent of water column undersaturated (%)	Comments	
42	50	Station of the Mouth of Columbia	
44	100	In Columbia River estuary	
43	100	In Columbia River Estuary	
45	70	Off of Newport OR	
96	100	Off of Newport OR	
101	78		

Note: these stations were sampled at the same time as the 2011 and 2013 pteropod sampling and percent water column undersaturated was calculated the same was as I previously did.

Deliberative Process / Ex. 5

These are additional carbonate chemistry data but there are no pteropod data offshore of Oregon in 2012. In 2012: There were 6 stations within OR state waters and an additional station very close to the state boundary with carbonate chemistry.

Station	Percent of Water Column Undersaturated (%)	Comments
22	19	In Columbia River Estuary
23	0.0	Mouth of Columbia River
36	73	
37	43	

49 57 54 66 55 60

Just outside state boundary line

Hope these are of use.

I'll be out in the field all day tomorrow,

Cheryl

From: Fullagar, Jill

Sent: Monday, November 14, 2016 7:40 AM

To: Cox, Michael <Cox.Michael@epa.gov>; Brown, Cheryl A. <Brown.Cheryl@epa.gov>; Labiosa, Rochelle

<a href="mailto:

<a

Subject: RE: briefing doc

Looks good. Thanks Mike. If anyone else has comments, you can add onto Mike's or send separately by COB today. I'd like to send it tonight. Thanks.

jill

Jill Fullagar, Impaired Waters Coordinator
Watershed Unit, Office of Water and Watersheds
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1200 Sixth Avenue, Suite 900 (OWW-192)
Seattle, WA 98101-3140
(206) 553-2582, (206) 553-1280 (fax)
fullagar.jill@epa.gov

From: Cox, Michael

Sent: Monday, November 14, 2016 7:15 AM

To: Fullagar, Jill < Fullagar_Jill@epa.gov>; Brown, Cheryl A. < Brown.Cheryl@epa.gov>; Labiosa, Rochelle < labiosa.rochelle@epa.gov>; Cope, Ben < Cope.Ben@epa.gov>; Cora, Lori < Cora.Lori@epa.gov>

Subject: RE: briefing doc

Thanks Jill. I have attached some suggestions for the briefing document. If you need to reach me you can call my cell phone as I am at a conference this week.

Personal Privacy / Ex. 6

Michael Cox
Office of Environmental Assessment
US EPA Region 10, 1200 Sixth Avenue, Suite 900
Seattle, WA 98101
206-553-1597
cox.michael@epa.gov

From: Fullagar, Jill

Sent: Thursday, November 10, 2016 12:25 PM

To: Brown, Cheryl A.; Cox, Michael; Labiosa, Rochelle; Cope, Ben; Cora, Lori **Subject:** briefing doc

Hi all,

Deliberative Process / Ex. 5

Deliberative Process / Ex. 5

[Please take a look, if you have time, to see if it needs further revision. Keep in mind, I will be sending the slides Cheryl just recently generated, and the doc we used last week with NOAA, as well. I have meetings until 2pm and then have to leave today, and am offsite all day on Monday. If you can get your revisions back to me by 5pm on Monday, I will send things out Monday before I go home. I'll work on developing an agenda on Tuesday. I expect that I'll give some background on where we're at with the list and our conversations with NOAA, etc. Cheryl, if you could then explain your analysis and graphs, that would be great, and Rochelle—if you could add in any other data/scientific info they should have, that would be lovely. Lori—I think then a summary of your thinking with Steve Sweeney and the legal pros and cons would be good. Thanks everyone.

jill

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